IN THE CLAIMS:

1. (CURRENTLY AMENDED) A method for <u>modifying and</u> testing a network protocol
stack <u>that includes a plurality of protocols, the method</u> comprising:

    executing <u>a test of said network protocol stack using a processing system, the test</u>
<u>modeling each protocol of said plurality of protocols of said protocol stack as separate</u>
<u>objects, the test simulating</u> communication between a plurality of devices using said net-
work protocol<u> stack</u>;

    receiving a command comprising code to modify one of ~~a~~ <u>said</u> plurality of proto-
cols in <u>said</u> ~~a~~ protocol stack ~~of said network protocol~~; and

    performing said modification on said one of said plurality of protocols in said pro-
tocol stack <u>while the test is executing, by changing said separate object corresponding to</u>
<u>said one of said plurality of protocols in said protocol stack</u>.

2. (ORIGINAL) The method of claim 1 wherein said command is received in interpreted
code.

3. (CURRENTLY AMENDED) The method of claim 1 further comprising:

    determining said one of said plurality of protocols in said <u>protocol</u> stack to modify
responsive to receiving said command.

4. (ORIGINAL) The method of claim 1 further comprising:

    determining whether said command is adding a message to said one of said plu-
rality of protocols; and

    adding said message to said one of said plurality of protocols.

5. (ORIGINAL) The method of claim 1 further comprising:

determining whether said command is to remove a message from said one of said plurality of protocols; and

removing said message from said protocol.

6. (ORIGINAL) The method of claim 1 further comprising:

determining whether said command is to modify an existing message in said one of said plurality of protocols;

removing said existing message from said one of said plurality of protocols; and

adding a new message to said one of said plurality of protocols including said existing message with modifications in said command.

7. (CURRENTLY AMENDED) The method of claim 1 further comprising:

determining whether said command is to modify a state machine of said <u>one of said plurality of</u> protocol<u>s</u>; and

modifying said state machine of said one of said plurality of protocols responsive to said command.

8. (CURRENTLY AMENDED) An apparatus for <u>modifying and</u> testing a network protocol <u>stack that includes a plurality of protocols, the apparatus</u> comprising:

means for executing <u>a test of said network protocol stack, the test modeling each</u> <u>protocol of said plurality of protocols of said protocol stack as separate objects, the test</u> <u>simulating</u> communication between a plurality of devices using said network protocol <u>stack</u>;

7   means for receiving a command comprising code to modify one ~~a~~ of said plurality

8   of protocols in ~~a~~ said protocol stack ~~of said network protocol~~; and

9   means for performing said modification on said one of said plurality of protocols

10   in said protocol stack <u>while the test is executing, by changing said separate object corre-</u>

11   <u>sponding to said one of said plurality of protocols in said protocol stack</u>.

1   9. (ORIGINAL) The apparatus of claim 8 wherein said command is received in inter-

2   preted code.

1   10. (CURRENTLY AMENDED) The apparatus of claim 8 further comprising:

2   means for determining said one of said plurality of protocols in said <u>protocol</u>

3   stack to modify responsive to receiving said command.

1   11. (ORIGINAL) The apparatus of claim 8 further comprising:

2   means for determining whether said command is adding a message to said one of

3   said plurality of protocols;

4   means for adding said message to said one of said plurality of protocols.

1   12. (ORIGINAL) The apparatus of claim 8 further comprising:

2   means for determining whether said command is to remove a message from said

3   one of said plurality of protocols; and

4   means for removing said message from said protocol.

1   13. (ORIGINAL) The apparatus of claim 8 further comprising:

2   means for determining whether said command is to modify an existing message in

3   said one of said plurality of protocols;

4   means for removing said existing message from said one of said plurality of pro-

5   tocols; and

6   means for adding a new message to said one of said plurality of protocols includ-

7   ing said existing message with modifications in said command.

1   14. (CURRENTLY AMENDED) The apparatus of claim 8 further comprising:

2   means for determining whether said command is to modify a state machine of

3   said <u>one of said plurality of</u> protocol<u>s</u>; and

4   means for modifying said state machine of said one of said plurality of protocols

5   responsive to said command.

1   15. (CURRENTLY AMENDED) A computer readable medium carrying one or more in-

2   structions for <u>modifying and</u> testing a network protocol <u>stack that includes a plurality of</u>

3   <u>protocols</u>, the one <u>or</u> more instructions including instructions which executed by one or

4   more processors, cause the one or more processors to perform ~~the method comprising~~:

5   executing <u>a test of said network protocol stack, the test modeling each protocol of</u>

6   <u>said plurality of protocols of said protocol stack as separate objects, the test simulating</u>

7   communication between a plurality of devices using said network protocol <u>stack</u>;

8   receiving a command comprising code to modify one of ~~a~~ <u>said</u> plurality of proto-

9   cols in <u>said</u> ~~a~~ protocol stack ~~of said network protocol~~; and

10   performing said modification on said one of said plurality of protocols in said pro-

11   tocol stack <u>while the test is executing, by changing said separate object corresponding to</u>

12   <u>said one of said plurality of protocols in said protocol stack</u>.

1   16. (ORIGINAL) The medium of claim 15 wherein said command is received in inter-

2   preted code.

1   17. (CURRENTLY AMENDED) The medium of claim 15 wherein said <u>one or more in-</u>

2   <u>structions further include instructions which executed by one or more processors, cause</u>

3   <u>the one or more processors to perform</u>~~method further comprises~~:

4   determining said one of said plurality of protocols in said <u>protocol</u> stack to modify

5   responsive to receiving said command.

1   18. (CURRENTLY AMENDED) The medium of claim 15 wherein said <u>one or more in-</u>

2   <u>structions further include instructions which executed by one or more processors, cause</u>

3   <u>the one or more processors to perform</u>~~method further comprises~~:

4   determining whether said command is adding a message to said one of said plu-

5   rality of protocols<u>; and</u>

6   adding said message to said one of said plurality of protocols.

1   19. (CURRENTLY AMENDED) The medium of claim 15 wherein said <u>one or more in-</u>

2   <u>structions further include instructions which executed by one or more processors, cause</u>

3   <u>the one or more processors to perform</u>~~method further comprises~~:

4   determining whether said command is to remove a message from said one of said

5   plurality of protocols; and

6   removing said message from said protocol.

20. (CURRENTLY AMENDED) The medium of claim 15 wherein said <u>one or more in-</u> <u>structions further include instructions which executed by one or more processors, cause</u> <u>the one or more processors to perform</u>~~method further comprises~~:

determining whether said command is to modify an existing message in said one of said plurality of protocols;

removing said existing message from said one of said plurality of protocols; and

adding a new message to said one of said plurality of protocols including said ex- isting message with modifications in said command.

21. (CURRENTLY AMENDED) The medium of claim 15 wherein said <u>one or more in-</u> <u>structions further include instructions which executed by one or more processors, cause</u> <u>the one or more processors to perform</u>~~method further comprises~~:

determining whether said command is to modify a state machine of said <u>one of</u> <u>said plurality of</u> protocols; and

modifying said state machine of said one of said plurality of protocols responsive to said command.

22. (CURRENTLY AMENDED) An apparatus for <u>modifying and</u> testing a network pro- tocol <u>stack that includes a plurality of protocols, the apparatus</u> comprising:

<u>a memory configured to store instructions;</u>

<u>a network connection device configured to provide connectivity to a network;</u>

<u>a central processing unit</u> ~~circuitry~~ configured to execute <u>instructions stored in the</u> <u>memory to initiate a test of said network protocol stack, the test simulating</u> communica- tion between a plurality of devices using said network protocol<u>, by emulating at least</u> <u>some of the plurality of devices;</u>

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9   an input/output (I/O) device ~~circuitry~~ configured to receive a command ~~compris-~~

10   ~~ing code~~ to modify one of said~~a~~ plurality of protocols in said~~a~~ protocol stack ~~of said net-~~

11   ~~work protocol~~; and

12   a central processing unit ~~circuitry~~ further configured to perform said modification

13   on said one of said plurality of protocols in said protocol stack while the test is executing

14   by changing a data structure corresponding to said one of said plurality of protocols in

15   said protocol stack.

1   23. (ORIGINAL) The apparatus of claim 22 wherein said command is received in inter-

2   preted code.

1   24. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2   the central processing unit further ~~circuitry~~ configured to determine said one of

3   said plurality of protocols in said stack to modify responsive to receiving said command.

1   25. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2   the central processing unit further ~~circuitry~~ configured to determine whether said

3   command is adding a message to said one of said plurality of protocols; and

4   the central processing unit further ~~circuitry~~ configured to add said message to said

5   one of said plurality of protocols.

1   26. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2   the central processing unit further ~~circuitry~~ configured to determine whether said

3   command is to remove a message from said one of said plurality of protocols; and

4   the central processing unit further ~~circuitry~~ configured to remove said message

5   from said protocol.

1   27. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2   the central processing unit further ~~circuitry~~ configured to determine whether said

3   command is to modify an existing message in said one of said plurality of protocols;

4   the central processing unit further ~~circuitry~~ configured to remove said existing

5   message from said one of said plurality of protocols; and

6   the central processing unit further ~~circuitry~~ configured to add a new message to

7   said one of said plurality of protocols including said existing message with modifications

8   in said command.

1   28. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2   the central processing unit further ~~circuitry~~ configured to determine whether said

3   command is to modify a state machine of said <u>one of said plurality of</u> protocols; and

4   the central processing unit further ~~circuitry~~ configured to modify said state ma-

5   chine of said one of said plurality of protocols responsive to said command.

1   29. (NEW) The method of claim 1 wherein said performing said modification while the

2   test is executing performs the test absent recompilation of said network protocol stack or

3   restart of the test.

1   30. (NEW) The apparatus of claim 22 wherein the central processing unit is configured to

2   perform said modification while the test is executing absent recompilation of said net-

3   work protocol stack or restart of the test.